EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Bradley M Knepper (Reg No. 44,189) on 06/07/2009.

Please replace the previous version of the Examiner's Amendment dated 03/23/2010

with the claims as follows:

1. (Currently Amended) A computer-implemented method for balancing resource loads,

comprising:

receiving a work request;

determining for each of a plurality of service locations a probability of servicing

said work request within a target time, wherein said determined probability includes

determining a relative probability for each service location included in the plurality of

service locations by calculating a number of opportunities to service said work request

within said target time by each service location included in the plurality of service

locations, wherein said number of opportunities is calculated as a function of a weighted

advance time (WAT), where WAT is a weighted advance time for a work request

assigned to said service location;

selecting at least a first service location having at least one of a greatest determined probability of servicing said work request within said target time and a sufficient determined probability of servicing said work request within said target time; and assigning said work request to said selected service location.

2. (Previously Presented) The method of Claim 1, wherein said step of selecting at least a first service location comprises selecting a first service location having a sufficient determined probability of servicing said work request within said target time.

3. (Previously Presented) The method of Claim 1, wherein said step of selecting at least a first service location comprises selecting a first service location having a greatest determined probability of servicing said work request within said target time.

4. (Previously Canceled)

5. (Previously Canceled)

6. (Previously Presented) The method of Claim 1, wherein selecting at least a first service location comprises selecting a first service location having at least a selected minimum number of opportunities to service said work request within said target time.

7. (Previously Presented) The method of Claim 1, wherein said step of selecting at least a first service location comprises selecting a first service location having a greatest number of opportunities to service said work request within said target time.

8. (Previously Presented) The method of Claim 1, wherein said number of opportunities (#OPPS) is calculated as #OPPS=((Target time-EWT)/WAT)+1, where EWT is an estimated wait time for a work request assigned to said service location, and where WAT is a weighted advance time for a work request assigned to said service location.

9. (Previously Presented) The method of Claim 1, further comprising, in response to more than one service location having a greatest calculated number of opportunities to service said work request within said target time, calculating an advance time metric.

10. (Original) The method of Claim 9, wherein said advance time metric comprises an expected wait time, wherein said step of selecting comprises selecting a location having a lowest expected wait time.

11. (Original) The method of Claim 9, wherein said advance time metric comprises a weighted advance time trend, wherein said step of selecting comprises selecting a location having a lowest weighted advance time trend.

12. (Original) The method of Claim 11, wherein said weighted advance time trend (WAT_Trend) is calculated as $WAT\_Trend_n = (x*WAT\_Trend_{n-1}) + ((1-x)*WAT\_Change)$, where x is a constant, and where the WAT_Change is calculated as $WAT\_Change=(WAT_n-WAT_{n-1})/WAT_{n-1}$.

13. (Original) The method of Claim 1, wherein each of said service locations is associated with a queue capable of containing a plurality of work requests.

14. (Previously Presented) The method of Claim 1, wherein said selected service location comprise at least one split.

15. (Canceled)

16. (Currently Amended) A load-balancing apparatus, including a hardware processor and memory, comprising:

    means for receiving a work request;

    means for calculating a probability that a service location is capable of servicing said work request within a target time, wherein said means for calculating a probability includes means for calculating a number of opportunities to service said work request within said target time with respect to a service location, wherein said number of opportunities is calculated as a weighted advance time (WAT), where WAT is a weighted advance time for a work request assigned to said service location;

means for selecting a service location having at least one of a highest probability

of servicing said work request within said target time and a sufficient probability of

servicing said work request within said target time; and

means for allocating said work request to said selected service location.

17. (Original) The apparatus of Claim 16, wherein said service location is associated

with a queue and comprises at least one associated resource.

18. (Original) The apparatus of Claim 16, wherein said service location comprises a

split.

19. (Original) The apparatus of Claim 16, further comprising means for calculating an

advance time metric.

20. (Currently Amended) A work allocation apparatus, comprising:

        a plurality of service locations;

        a plurality of service resources, wherein at least a one of said service resources

is associated with each of said service locations;

        a communication network interface, operable to receive work requests; and

        a hardware processor implementing a controller, wherein said controller operates

to calculate a relative probability that a work request will be serviced within a target time

for each service location included in the plurality of service locations, wherein said

relative probability is determined for a service location by calculating a number of opportunities to service said work request within a predetermined target time, <u>wherein said number of opportunities is calculated as a function of a weighted advance time (WAT), where WAT is a weighted advance time for a work request assigned to said service location</u>, wherein a work request received at said communication network interface is assigned to a service location having at least one of a highest probability of servicing said work request within said predetermined target time and a sufficient probability of servicing said work request within said predetermined target time.

21. (Original) The apparatus of Claim 20, wherein said service resources comprise service agents.

22. (Original) The apparatus of Claim 20, wherein said service resources are organized into splits.

23. (Original) The apparatus of Claim 20, wherein said work request is associated with a request for assistance.

24. (Original) The apparatus of Claim 20, wherein said communication network interface is interconnected to at least one of an Internet protocol network and a public switched telephone network.

25. (Original) The apparatus of Claim 20, wherein said service locations each comprise a server.

26. (Currently Amended) A computer storage medium containing instructions ~~for performing a method~~, when executed by a processor, to perform the method comprising:

receiving a work request;

calculating for each of a plurality of service locations a relative probability that said work request will receive service within a target time period, wherein said calculated probability comprises a calculated number of opportunities that a service location will have to service said work request within said target time period, wherein said number of opportunities is calculated as a function of an expected wait time (EWT) for said service location;

selecting at least one a one of said plurality of service locations having at least one of a greatest probability of servicing said work request within said target time period and a sufficient probability of servicing said work request within said target time period; and

assigning said work request to one of said selected service locations.

27. (Previously Canceled)

28. (Canceled)

29. (Currently Amended) The method of Claim [[28]] 26, wherein said number of

opportunities (#OPP) is given by: #OPP=((Target time-EWT)/WAT)+1, where EWT is an

expected wait time for said service location, and where WAT is a weighted advance

time for said service location.

30. (Original) The method of Claim 26, further comprising: in response to a number of

service locations having an equal calculated probability, calculating an advance time

metric for each of said number of service locations.

31. (Original) The method of Claim 30, wherein said calculating an advance time

metric comprises:

      calculating a weighted advance time;

      calculating a weighted advance time change;

      calculating a weighted advance time trend; and

      wherein said step of selecting a one of said plurality of service locations

comprises selecting a service location with a lowest calculated weighted advance time

trend.

32. (Original) The method of Claim 31, wherein said weighted advance time change

(WAT_Change) is given by WAT_Change=(WATn-WATn-1)/WATn-1, where WATn is

the weighted advance time most recently calculated, and where WATn-1 is a previously

calculated weighted advance time, wherein said weighted advance time trend

(WAT_Trend) is given by WAT_Trendn = (x*WAT_Trendn-1) + ((1-x)*WAT_Change),

where x is a constant.

33. (Original) The method of Claim 30, wherein said calculating an advance time metric

comprises calculating an estimated waiting time.

34. (Original) The method of Claim 26, further comprising: selecting a target time for

servicing a work request.

35. (Canceled)

36. (Previously Presented) The apparatus of Claim 16, wherein said number of

opportunities (#OPPS) is calculated as #OPPS=((Target time-EWT)/WAT)+1, where

EWT is an estimated wait time for a work request assigned to said service location, and

where WAT is a weighted advance time for a work request assigned to said service

location.

37. (Previously Presented) The apparatus of Claim 20, wherein said number of

opportunities (#OPPS) is calculated as #OPPS=((Target time-EWT)/WAT)+1, where

EWT is an estimated wait time for a work request assigned to said service location, and

where WAT is a weighted advance time for a work request assigned to said service

location.

38. (Currently Amended) The method of Claim [[28]] 26, wherein said number of

opportunities (#OPP) is given by: #OPP=((Target time-EWT)/WAT)+1, where EWT is an

estimated wait time for a work request assigned to said service location, and where

WAT is a weighted advance time for a work request assigned to said service location.

-- END OF AMENDMENT--

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ERIC C. WAI whose telephone number is (571)270-

1012. The examiner can normally be reached on Mon-Fri, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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/Meng-Ai An/   /Eric C Wai/
Supervisory Patent Examiner, Art Unit 2195   Examiner, Art Unit 2195